

# **DRAFT**

# **Magnolia Hollow**

# **Conservation Area**

**Ten-Year Area Management Plan**  
**FY 2017-2026**



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<http://mdc.mo.gov/node/19221?ap=8508>

## OVERVIEW

- **Official Area Name:** Magnolia Hollow Conservation Area, # 8508
- **Year of Initial Acquisition:** 1985
- **Acreage:** 1,751 acres
- **County:** Ste. Genevieve
- **Division with Administrative Responsibility:** Forestry
- **Division with Maintenance Responsibility:** Forestry
- **Statements of Purpose:**
  - A. Strategic Direction**

Manage for wildlife and forest resources with emphasis on forest species and compatibility with outdoor recreational opportunities.
  - B. Desired Future Condition**

The desired future condition of Magnolia Hollow Conservation Area (CA) is healthy forest, woodland, open land, and riparian ecosystems that provide a variety of public use opportunities.
  - C. Federal Aid Statement**

N/A

## GENERAL INFORMATION AND CONDITIONS

### **I. Special Considerations**

- A. Priority Areas:** Brickley Hills Terrestrial Conservation Opportunity Area, Frenchman Creek Aquatic Conservation Opportunity Area, Stoples Hollow Aquatic Conservation Opportunity Area, Priority Forest Landscape
- B. Natural Areas:** Brickley Hills Natural Area

Parts of the 221 acre Brickey Hills Natural Area were recognized as early as 1975 as having significant forest natural communities. The current natural area conserves high-quality old second-growth forest and woodland communities that support a diverse ground flora along with populations of characteristic songbirds, amphibians and reptiles.

### **II. Important Natural Features and Resources**

- A. Species of Conservation Concern:** Species of conservation concern are not known from this site, but are found in the surrounding area. Area Managers should consult annually with the Natural History Biologist.
- B. Caves:** None
- C. Springs:** Yes, records kept with Missouri Department of Conservation (Department) Natural History Biologist.
- D. Other:** Magnolia Hollow CA contains, Mesic limestone/dolomite forest, dry-mesic limestone/dolomite forest, dry-mesic chert forest, dry-mesic chert

woodland, dry limestone/dolomite woodland, dry limestone/dolomite cliff, limestone/dolomite talus, mesic bottomland forest, and riverfront forest natural communities.

### III. Existing Infrastructure

- Four parking lots, Americans with Disabilities Act (ADA) accessible
- Hiking trails (one 0.3-mile ADA accessible trail, one 1.1-mile trail)
- Campground with picnic tables, grills and fire rings
- Static archery range
- Skeet shooting range (ADA accessible)
- Viewing platform (ADA Accessible) with picnic table
- Five-acre lake

### IV. Area Restrictions or Limitations

- A. Deed Restrictions or Ownership Considerations:** None
- B. Federal Interest:** Federal funds may be used in the management of this land. Fish and wildlife agencies may not allow recreational activities and related facilities that would interfere with the purpose for which the state is managing the land. Other uses may be acceptable and must be assessed in each specific situation.
- C. Easements:** Burlington Northern Railroad “Right-of-Way” and Joseph Mahue ingress and egress to private land inholding.
- D. Cultural Resources Findings:** No known cultural resources.
- E. Endangered Species:** None observed.
- F. Boundary Issues:** None

## MANAGEMENT CONSIDERATIONS

### V. Terrestrial Resource Management Considerations

Magnolia Hollow CA contains approximately 1,671 acres of forests and woodlands. Management of these areas is focused on maintaining resilient natural communities that provide for diverse wildlife.

#### **Challenges and Opportunities:**

- 1) Manage forest and woodland communities.
- 2) Monitor and manage as needed the natural area’s natural communities.
- 3) Maintain the open lands on Magnolia Hollow CA in early vegetative successional stages for improved wildlife habitat.

**Management Objective 1:** Manage for sustainable and healthy forest and woodland communities with emphasis on wildlife habitat and improved timber quality for future harvests.

**Strategy 1:** Continue to implement the forest inventory schedule for the area. Inventory will be used to guide future management decisions. (Forestry)

**Strategy 2:** Use uneven-aged, even-aged, forest stand improvement, and prescribed fire management practices to maintain and regenerate forest and woodland communities where appropriate. (Forestry)

**Strategy 2:** Monitor forests and woodlands for invasive vegetation, diseases and insects. Suppress any infestations that may develop by using mechanical and chemical control methods. (Forestry, Wildlife)

**Management Objective 2:** Maintain and enhance 221-acre natural area.

**Strategy 1:** Monitor the area for invasive species. Suppress any infestation that may develop using appropriate methods. (Wildlife, Forestry)

**Strategy 2:** Implement a prescribed fire regime in the woodland natural community to maintain the natural area to promote the unique and diverse natural communities and their associated plants and animals. Prescribed fire will also be used, to a lesser intensity and frequency in the forest sites to help slow succession to more shade tolerant species. (Forestry, Wildlife)

**Strategy 3:** Survey the natural area for Missouri species of conservation concern (Wildlife)

**Strategy 4:** Utilize non-commercial thinning of understory sugar maple and eastern red cedar on appropriate sites as needed to promote oak regeneration and a more diverse ground flora. (Forestry)

**Strategy 5:** Investigate the expansion of the natural area to include a larger portion of Magnolia Hollow CA. (Forestry, Wildlife)

**Management Objective 3:** In open fields, provide early successional habitat.

**Strategy 1:** Prescribe burn warm season grass and old fields with varying size and timing too provide a diversity of plant responses. (Forestry)

**Management Objective 4:** Create and enhance shrubby/edge cover to enhance wildlife habitat.

**Strategy 1:** Use mechanical (e.g. chain saw and tree shear) to disturb overgrown shrub groups, fence rows and brushy draws. (Forestry)

**Management Objective 5:** Manage designated open land fields with perennial and annual crops.

**Strategy 1:** In food plot acres, plant a variety of grain and green browse crops to supplement native food sources for wildlife. (Forestry)

## **VI. Aquatic Resources Management Considerations**

### **Challenges and Opportunities:**

- 1) Manage fish populations in lake for quality angling.
- 2) Manage aquatic and/shoreline vegetation at the lake for quality fish habitat and angler access.
- 3) Maintain area ponds incapable of supporting quality fisheries as habitat for amphibians, reptiles and other wildlife.

**Management Objective 1:** Manage fish populations in lake.

**Strategy 1:** Maintain fish populations through area regulations. (Fisheries, Protection)

**Strategy 2:** Supplement natural recruitment and/or provide additional species by stocking, when necessary. (Fisheries)

**Management Objective 2:** Manage aquatic and shoreline vegetation.

**Strategy 1:** Use chemical, biological and/or mechanical methods to control aquatic and/or shoreline vegetation. (Fisheries)

**Strategy 2:** Establish desirable aquatic vegetation in lake. (Fisheries)

**Management Objective 3:** Manage ponds incapable of supporting quality fisheries as habitat for amphibians, reptiles and other wildlife.

**Strategy 1:** Maintain wildlife ponds by allowing shoreline and aquatic vegetation to develop. Fell trees into water when available for reptile use. (Wildlife, Forestry)

## **VII. Public Use Management Considerations**

### **Challenges and Opportunities:**

- 1) Provide for public hunting and viewing opportunities.
- 2) Maintain and encourage educational and interpretive opportunities.
- 3) Maintain hiking trail for user access.
- 4) Build relationships with neighboring landowners.

**Management Objective 1:** Provide public hunting and viewing opportunities.

**Strategy 1:** Conduct annual management activities that will provide habitat for a diversity of wildlife species. (Forestry)

**Management Objective 2:** Improve educational and interpretive opportunities on Magnolia Hollow CA.

**Strategy 1:** Communicate recreational opportunities to the public. (Forestry)

**Strategy 2:** Communicate the uniqueness of the area to teachers, students, scout groups and other youth groups to facilitate as a possible destination for ecology classes, school programs and workshops. (Outreach and Education, Forestry)

**Management Objective 3:** Maintain hiking trail for user access.

**Strategy 1:** Keep hiking trail clear of brush and downed trees. (Forestry)

**Strategy 2:** Keep trail properly marked to improve the ability of users to navigate the trail. (Forestry)

**Strategy 3:** Monitor hiking trail for possible soil erosion issues and implement best management practices to prevent erosion. (Forestry)

**Management Objective 4:** Facilitate a good working relationship with neighboring landowners.

**Strategy 1:** Work with neighbors to minimize any boundary, trespass, invasive species or other issues affecting Magnolia Hollow CA or private property. (Forestry)

## VIII. Administrative Considerations

### **Challenges and Opportunities:**

- 1) Maintain area infrastructure at current levels.
- 2) Consider acquisition of land.

**Management Objective 1:** Maintain area infrastructure at current levels.

**Strategy 1:** Maintain area infrastructure in accordance with Missouri Department of Conservation guidelines. (Forestry)

### **Lands Proposed for Acquisition:**

When available, adjacent land may be considered for acquisition from willing sellers. Tracts that improve area access, provide public use opportunities, contain unique natural communities and/or species of conservation concern, or meet other Department priorities, as identified in the annual Department land acquisition priorities, may be considered.



## APPENDICES

### Area Background:

Magnolia Hollow Conservation Area is in Ste. Genevieve County, 10 miles north of Ste. Genevieve along the Mississippi River.

This rugged 1,751-acre area is bordered by Establishment Creek and Schmidt's Island, along the Mississippi River. It was purchased entirely with Missouri Department of Conservation funds in three separate purchases.

After the final purchase the service roads and parking lots were established to help management and public access. Much of the main service road was the historic white sands county road that has been abandon. This road gets inundated with flood waters from the Mississippi River. In 1994, a shotgun and archery range was opened. The area was determined to be unsafe for a rifle range. In 1997, a primitive campground was established. There are several sites with picnic tables and grills. In 2004, an ADA accessible trail and viewing platform was established for observing the Mississippi River and Establishment Creek bottoms. In 2013, a five acre lake and new parking lot were completed. In 2015, the county road to access the area was changed from White Sands Road to Magnolia Hollow Drive.

The forests at Magnolia Hollow CA are diverse, ranging from bottomland forests to woodlands with small cedar glades. In general, there are different oak dominated community types that are succeeding to sugar maple on the good forest soils and eastern red cedar on the poor woodland soils. The management since the Department has taken ownership has tried to slow these successional trends and maintain the more diverse oak community types.

In the open fields, the Department has converted the traditional agricultural fields dominated by fescue to more native warm season grass and early successional old field communities. Food plots were established where the soil and topography allowed.

### Current Land and Water Types:

Land/Water Type	Acres	% of Area
Forest	1,252	71
Woodland	419	24
Field	75	4
Lake	5	1
<b>Total</b>	<b>1,751</b>	<b>100</b>



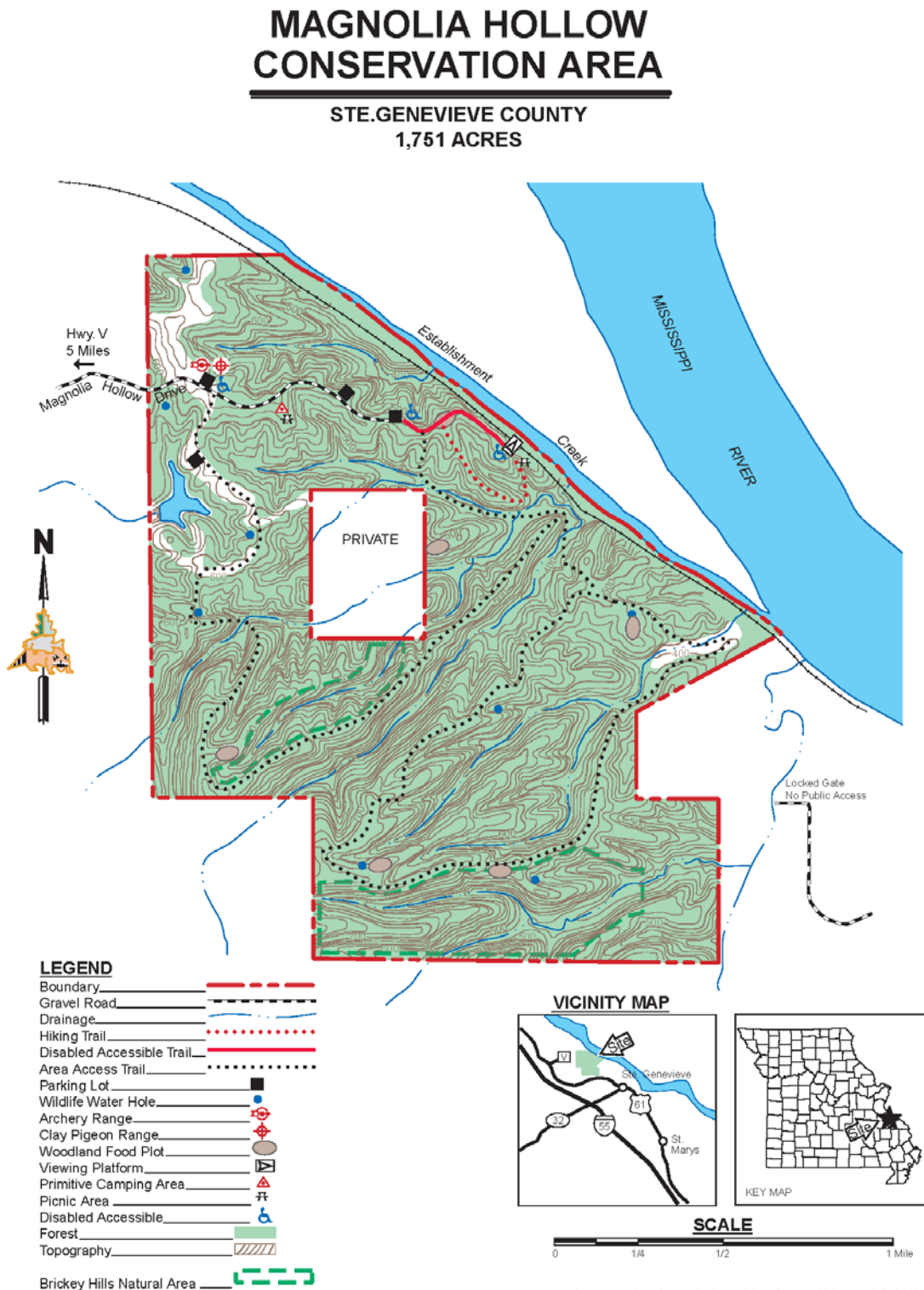
**Maps:**

Figure 1: Area Map

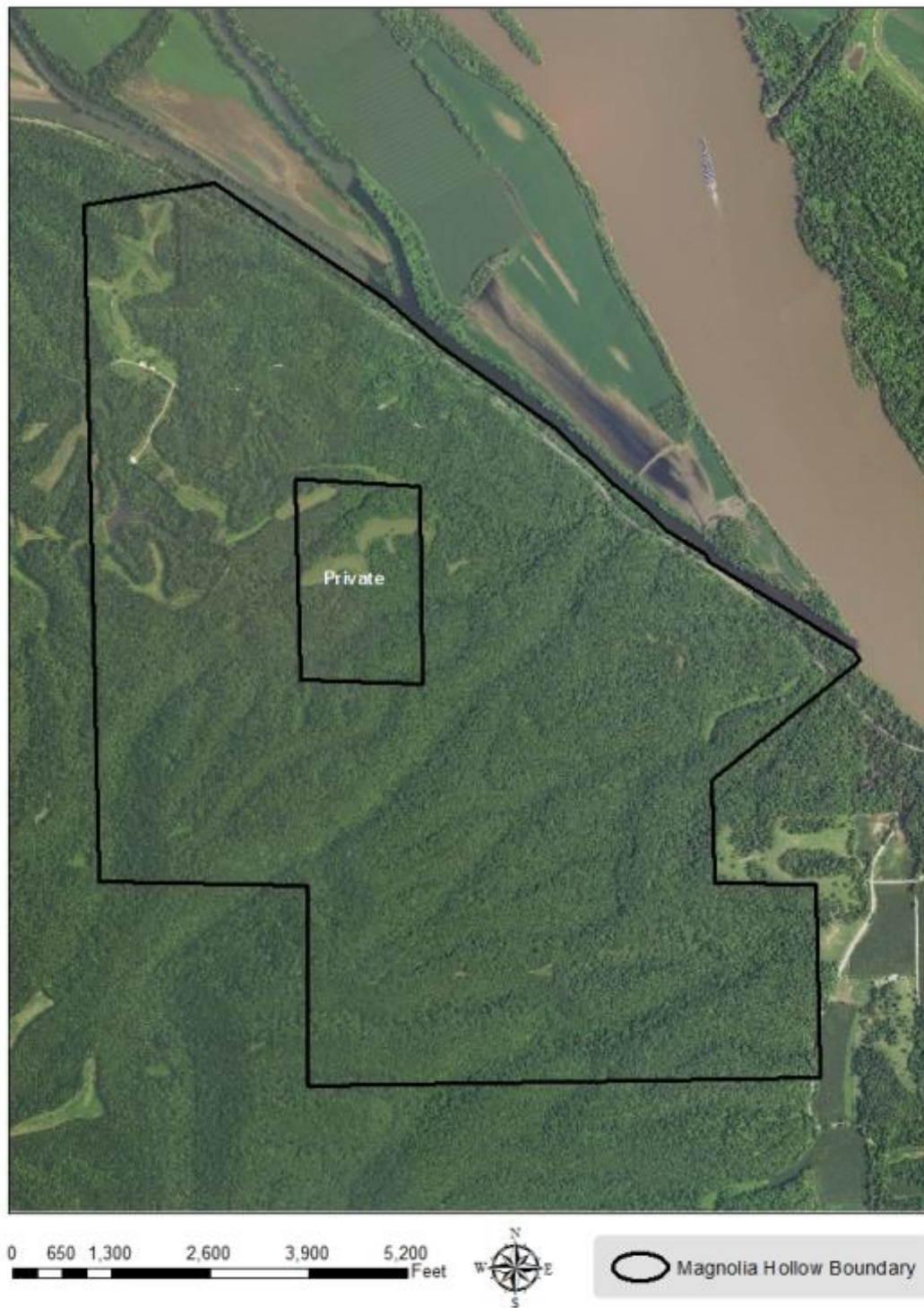
Figure 2: Aerial Map

Figure 3: Current Vegetation Map

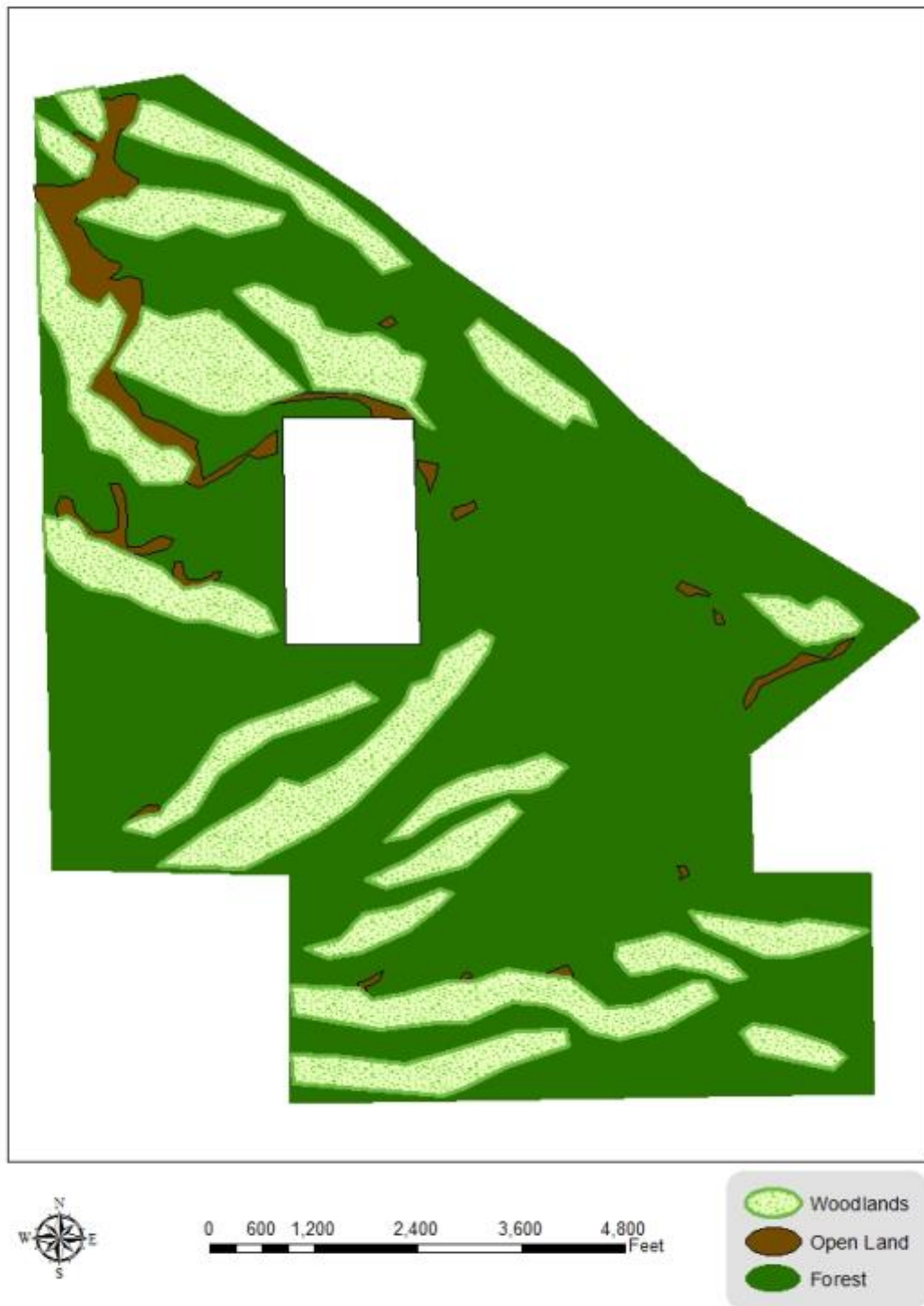
Figure 1: Area Map



**Figure 2: Aerial Map**



**Figure 3: Current Vegetation Map**



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